PATENT

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Serial No.: 10/718,435

Filed: November 20, 2003

For: A COMBINED COATING PROCESS COMPRISING MAGNETIC FIELD-ASSISTED, HIGH-POWER, PULSED CATHODE SPUTTERING AND AN UNBALANCED MAGNETRON

Applicants: Arutiun Papken Ehiasarian et al.

Attorney Ref: 2146/41506/Case 1

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 8, 2003.

James R. Foley

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with Applicant's duty of candor under 37 CFR §1.56 and in compliance with 37 CFR §1.97 and §1.98, Applicant is not aware of any material prior art but, in an abundance of caution and candor, Applicant submits the present Information Disclosure Statement and Form PTO-1449.

This Information Disclosure Statement is being filed within three months of the filing date and before the receipt of a first Office Action on the merits and constitutes a bona fide attempt to comply with 37 CFR §1.97 and §1.98.

In accordance with 37 C.F.R. §1.97, the presentation of this information shall not be construed as a representation that no other material information as defined in 37 C.F.R. §1.56 exists, or as an admission that the information cited in this statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56.

Two of the cited references are not in English. DE 101 24 749 is relevant in that it discloses a PVD process for coating substrates. The article "Nouvelles tendances en procedes magnetron et arc" is relevant in that it discloses a process using the combination of a cathodic arc discharge and an unbalanced magnetron for the coating of tools and components which are subjected to severe wear.

Should the Examiner believe a fee is required, the United States Patent and Trademark Office is hereby authorized and requested to charge the fee to the deposit account of the undersigned firm, Account No. 20-1495.

Respectfully submitted,

Dated: December 8, 2003

By: _____

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Form PTO-1449 (Rev. 2-32)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO. 2146/41506/1	SERIAL NO. 10/718,435
APPLICANT: Arutiun Papken Ehiasarian et al.	
FILING DATE: November 20, 2003	GROUP Not yet assigned

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
		6 2 9 6 7 4 2	10/2/2001	Kouznetsov			
		6 0 3 3 7 3 4	3/7/2000	Muenz et al.			
		5 3 0 6 4 0 7	4/26/1994	Hauzer et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES	TRANSLATION NO
DE	1	0 1 2 4 7 4 9	11/28/2002	Germany				X
EP		1 2 6 0 6 0 3	11/27/2002	Europe				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

			Munz, W.-D., "Nouvelles tendances en procedes magnetron et arc", Le Vide, No. 297, Vol. 3/4, 2000, p. 205-223.
			Munz, W.-D., "Wear Resistant PVD Coatings for High Temperature (950°C) Applications", SVC 42nd Annual Conference, Chicago, April 17-22, 1999, p. 350-356.
			Schonjahn, C., Donohue, L.A., Lewis, D.B., and Munz, W.-D., "Enhanced adhesion through local epitaxy of transition-metal nitride coatings on ferritic steel promoted by metal ion etching in a combined cathodic arc/unbalanced magnetron deposition system", Journal of Vacuum Science and Technology, Vol. 18, Issue 4, 2000, p. 1718-1723.
			Munz, W.-D., Smith, I.J., Lewis, D.B., and Creasey, S., "Droplet formation on steel substrates during cathodic steered arc metal ion etching", Vacuum, Vol. 48, Issue 5, 1997, p. 473-481.
			Wang, H.W., Stack, M.M., Lyon, S.B., Hovsepian, P., and Munz, W.-D., "The corrosion behaviour of macroparticle defects in arc bond-sputtered CrN/NbN superlattice coatings", Surface and Coatings Technology, Vol. 126, 2000, p. 279-287.
			Ehiasarian, A.P., New, R., Munz, W.-D., Hultman, L., Helmersson, U., and Kouznetsov, V., "Influence of high power densities on the composition of pulsed magnetron plasmas", Vacuum, Vol. 65, 2002, p. 147-154.

EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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